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VOLUME 1

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CORE 13 (S36)

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Library of Congress Cataloging in Publication Data:

Current protocols in molecular biology. 3 vols.

1. Molecular biology—Technique. 2. Molecular biology—Laboratory manuals. I. Ausubel, Frederick M.

QH506.C87 1987 574.8'8'028 87-21033

ISBN 0-471-50338-X

Printed in the United States of America

20 19 18 17 16 15 14 13

IN SITU HYBRIDIZATION AND IMMUNOHISTOCHEMISTRY

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14.0.1

SDS electrophoresis buffer, 5×

15.1 g Tris base
72.0 g glycine
5.0 g SDS
H₂O to 1000 ml
Dilute to 1× or 2× for working solution, as appropriate

Do not adjust the pH of the stock solution, as the solution is pH 8.3 when diluted. Store at 0° to 4°C until use (up to 1 month).

SED (standard enzyme diluent)

20 mM Tris-Cl, pH 7.5
500 µg/ml bovine serum albumin (Pentax Fraction V)
10 mM 2-mercaptoethanol
Store up to 1 month at 4°C

Sodium acetate, 3 M

Dissolve 408 g sodium acetate·3H₂O in 800 ml H₂O
Add H₂O to 1 liter
Adjust pH to 4.8 or 5.2 (as desired) with 3 M acetic acid

Sodium acetate buffer, 0.1 M

Solution A: 11.55 ml glacial acetic acid/liter (0.2 M).
Solution B: 27.2 g sodium acetate (NaC₂H₃O₂·3H₂O)/liter (0.2 M).

Referring to Table A.2.2 for desired pH, mix the indicated volumes of solutions A and B, then dilute with H₂O to 100 ml. (See Potassium acetate buffer recipe for further details.)

Sodium phosphate buffer, 0.1 M

Solution A: 27.6 g NaH₂PO₄·H₂O per liter (0.2 M).
Solution B: 53.65 g Na₂HPO₄·7H₂O per liter (0.2 M).

Referring to Table A.2.3 for desired pH, mix the indicated volumes of solutions A and B, then dilute with H₂O to 200 ml. (See Potassium phosphate buffer recipe for further details.)

SSC (sodium chloride/sodium citrate), 20×

3 M NaCl (175 g/liter)
0.3 M Na₃citrate·2H₂O (88 g/liter)
Adjust pH to 7.0 with 1 M HCl

STE buffer

10 mM Tris-Cl, pH 7.5
10 mM NaCl
1 mM EDTA, pH 8.0

TAE (Tris/acetate/EDTA) electrophoresis buffer

50× stock solution:

242 g Tris base
57.1 ml glacial acetic acid
37.2 g Na₂EDTA·2H₂O
H₂O to 1 liter

Working solution, pH ~8.5:

40 mM Tris-acetate
2 mM Na₂EDTA·2H₂O

TBE (Tris/borate/EDTA) electrophoresis buffer

10× stock solution, 1 liter:

108 g Tris base (890 mM)
55 g boric acid (890 mM)
40 ml 0.5 M EDTA, pH 8.0 (20 mM)